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10/708,864

03/29/2004

Jody H. Pattie

03-0208 (BOE 0471 PA)

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12/06/2006

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EXAMINER

COLLINS, TIMOTHY D

ART UNIT

PAPER NUMBER

3643

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,864

Applicant(s)

PATTIE ET AL.

Examiner

Timothy D. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 10-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 23-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/29/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/14/06 have been fully considered but they are not persuasive.

In response to applicant's argument that Dean and Bach are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Dean and Bach are both drawn towards adjustable supporting systems. In identifying analogous art, one may look towards the problems facing the inventor at conception to identify the problems identified, in the case at hand, Bach and Dean are concerned with supporting along the longitude of a device while allowing lateral adjustments from side to side. Dean addresses the lateral adjustments by use of brackets sliding along a curved tube, however an improvement could have been done through use of the grooved rail taught by Bach to prevent radial/torsional movement along the tube of Dean. Not only are the lateral adjustment means of Dean and Bach in analogous arts, but they would be art recognized equivalents so far as providing a sliding adjustable device.

In response to applicant's arguments, the recitation "for mounting a duct to an airframe of an aircraft" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight

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where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to applicant's argument that the device is for an aircraft airframe, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's argument that the art is not reasonably pertinent to the problem that the applicant's device attempts to solve. The examiner maintains that the devices of the prior art are related in that they are mounting systems for items which have a longitudinal dimension that is longer than the lateral dimensions. Therefore the prior art is pertinent to the field of the device in the instant invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,3-9, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al (US 6164507) in view of Bach (US 2375513).

Dean teaches a rail (20), at least one pair of support brackets (plural 28) coupled to rail positioned to support proximal surface (col 4 lines 16-20); and at least one flexible band (84) for distributing a clamping load substantially across a distal surface (fig 1, as the band conforms to the distal surface of object being supported); wherein the support brackets (28) has a support portion (fig 2, 62, 64) for distributing said clamping load across proximal surface of object being supported. Dean also discloses in the figures that the device is sized and shaped for supporting ducts of various sizes and shapes in that the band (strap 82 and 84) is adjustable through the buckle as seen at about numbers 130 and clamping the device being held so as to support it for distributing load. Also Dean discloses that the strap is resilient in that it is made of nylon or natural and

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synthetic materials as seen in column 5 at lines 35-38. The nylon strap is resilient because it can withstand shock and a load without permanent deformation as is the definition of the term "resilient".

Dean doesn't teach the use of a grooved rail, but rather a curved tube along which the brackets clamp, nor does Dean teach supporting a duct. Bach and Dean are in the same field of endeavor, being adjustable mounting systems, and Bach teaches the use of a grooved rail along which the brackets ride and the support of pipes or ducts. The motivation for combining Bach and Dean would be to provide for an adjustable mounting system that has support against torsional movement along the track. Therefore, it would have been obvious to one skilled in the art at the time of invention to substitute a grooved track for the tube to create a selectively engageable gripping mounting device.

With respect to claim 3, the rail of Bach has a series of openings (21, 22) for passing a series of fasteners through (fig 7).

With respect to claim 4, wherein each support bracket (28) has at least one notch (108, 102) and aperture (110) for passing the flexible band (32) through.

With respect to claims 5, 6, 27 and 28, regarding manufacturing process of brackets and rails, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight.

With respect to claim 7, wherein the bracket has a predetermined radius (fig 3).

With respect to claim 8, regarding a flange interacting with the rail, Bach teaches the use of flanges (6, 8) interacting with a rail (19), the motivation to combine as described above with respect to claim 1.

With respect to claim 9, wherein the flexible band is made of a woven fabric belt member (col 5, lines 36-38).

Claims 2 and 24-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al (US 6164507) in view of Bach (US 2375513) and further in view of applicants' admission that "aircraft manufacturers are well known for producing aircrafts having HVAC systems... typically comprised of a series of cylindrical tubing or ducts... [typically requiring] a plurality of support assemblies for mounting each support assembly to the airframe of the aircraft." As seen in the background of the invention of the instant application.

With respect to claims 2 and 24-35, regarding a plurality of ducts, Dean can be used to support multiple parallel surfaces along the beam (24), and Bach can also be used to support multiple pipes or ducts along the same track (see figures 19 and 23). Furthermore, regarding an airframe with a plurality of ducts supported by said system, the first paragraph of applicant's discussion of the background of the invention discloses that "aircraft manufacturers are well known for producing aircrafts having HVAC systems... typically comprised of a series of cylindrical tubing or ducts... [typically requiring] a plurality of support assemblies for mounting each support assembly to the airframe of the aircraft." The motivation for using Dean in an airframe can be found in

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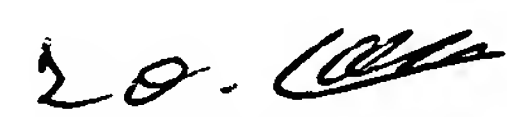
Dean which teaches a method for supporting a structure which has a selectively engageable gripping surface, and which can be adjusted to support a wide array of various sizes and shapes (col 5 lines 23-27). Therefore it would have been obvious to one skilled in the art at the time of invention to use a support system as taught by Dean and modified by Bach within an aircraft's airframe. For further details see rejections of claims 1,3-9 above and how the further dependent claims limitations are seen in the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D. Collins whose telephone number is 571-272-6886. The examiner can normally be reached on M-F, 7:00-3:00, with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 12/5/06
Timothy D. Collins
Primary Examiner
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